

## **BAB V**

### **KESIMPULAN DAN SARAN**

#### **A. Kesimpulan**

Sesuai dengan apa yang telah dibahas pada bab-bab terdahulu, maka penulis mengambil kesimpulan sebagai berikut:

1. Penelitian ini telah menghasilkan aplikasi sistem pendukung yang keputusan menerapkan model logika *fuzzy* tahani untuk penugasan guru untuk mengikuti pelatihan.
2. Hasil perhitungan Logika Fuzzy yang diterapkan ini akan menghasilkan keluaran nilai intensitas antara 0-1 sehingga guru yang nilainya 0 merupakan guru yang tidak direkomendasikan untuk dipilih dan nilai 1 merupakan guru yang direkomendasikan untuk dipilih.
3. Berdasarkan pengetesan *black box* dan *alpha test*, aplikasi telah berjalan dengan baik sesuai yang diharapkan.

#### **B. Saran**

Sistem ini memiliki beberapa kekurangan yang dapat dikembangkan untuk memperbaiki kinerja sistem. Adapun saran-saran dari penulis adalah sebagai berikut:

1. Seiring perkembangan teknologi informasi, maka akan lebih baik jika sistem yang ada sekarang untuk kedepannya dapat dikembangkan lagi dengan memanfaatkan teknologi internet.
2. Sistem ini dapat ditambahkan lagi kriteria yang lebih banyak agar pemilihan guru lebih kompleks.

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# Lampiran

## DAFTAR PENGUJIAN FUNGSI SISTEM

### SISTEM PENDUKUNG KEPUTUSAN PENUGASAN PELATIHAN BAGI GURU SD MUHAMMADIYAH TRINI MENGGUNAKAN MODEL *FUZZY* DATABASE TAHANI

| Fungsi Yang Diuji                        | Proses Pengujian  | Hasil Pengujian |                 |
|--|---|-----------------|-----------------|
|  |   | Berfungsi       | Tidak Berfungsi |
| Login Sistem                             | Setelah mengisi username password pengguna bisa menggunakan aplikasi  | √               |                 |
| Update Kriteria                          | Data kriteria diubah  | √               |                 |
| Input/Update Jenis Pelatihan             | Data jenis pelatihan ditambah/diubah  | √               |                 |
| Input/Update Guru                        | Data guru ditambah/diubah   | √               |                 |
| Proses seleksi guru yang akan ditugaskan | Menginputkan nama pelatihan, memilih jenis pelatihan, memilih kriteria, hasil seleksi ditampilkan, memilih guru yang ditugaskan untuk mengikuti pelatihan | √               |                 |
| cek histori seleksi                      | Memilih nama pelatihan, dan menampilkan data guru yang mengikuti pelatihan  | √               |                 |

Dosen Pembimbing II



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# REKAPITULASI PENGISIAN KUISIONER

| No         | Nama        | Pekerjaan   | Pertanyaan |    |    |    |    |
|------------|-------------|-------------|------------|----|----|----|----|
|            |             |             | 1          | 2  | 3  | A  | 5  |
| 1          | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 2          | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 3          | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 4          | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 5          | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 6          | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 7          | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 8          | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 9          | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 10         | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 11         | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 12         | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 13         | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 14         | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 15         | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 16         | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 17         | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 18         | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 19         | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 20         | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 21         | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 22         | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 23         | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 24         | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 25         | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 26         | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 27         | DIISI BEBAS | DIISI BEBAS | A          | A  | A  | A  | A  |
| 28         | DIISI BEBAS | DIISI BEBAS | A          | A  | B  | A  | A  |
| 29         | DIISI BEBAS | DIISI BEBAS | B          | B  | B  | A  | A  |
| 30         | DIISI BEBAS | DIISI BEBAS | B          | B  | B  | B  | B  |
| PERTANYAAN |             |             | P1         | P2 | P3 | P4 | P5 |
| JUMLAH A   |             |             | 28         | 28 | 27 | 29 | 29 |
| JUMLAH B   |             |             | 2          | 2  | 3  | 1  | 1  |
| JUMLAH C   |             |             | 0          | 0  | 0  | 0  | 0  |
| JUMLAH D   |             |             | 0          | 0  | 0  | 0  | 0  |

**ANGKET PENGUJIAN**  
**SISTEM PENDUKUNG KEPUTUSAN PENUGASAN PELATIHAN**  
**BAGI GURU SD MUHAMMADIYAH TRINI MENGGUNAKAN**  
**MODEL *FUZZY* DATABASE TAHANI**

---

Nama : .....

Pekerjaan : .....

Berilah tanda silang (X) pada jawaban yang menurut anda paling sesuai.

1. Program aplikasi ini mudah dijalankan bagi pengguna?
  - a. Sangat Setuju
  - b. Setuju
  - c. Tidak Setuju
  - d. Sangat Tidak Setuju
2. Tampilan interface program menarik?
  - a. Sangat Setuju
  - b. Setuju
  - c. Tidak Setuju
  - d. Sangat Tidak Setuju
3. Waktu yang dibutuhkan sistem untuk mengolah data relatif cepat?
  - a. Sangat Setuju
  - b. Setuju
  - c. Tidak Setuju
  - d. Sangat Tidak Setuju
4. Sistem dapat menampilkan ranking nilai guru dengan jelas?
  - a. Sangat Setuju
  - b. Setuju
  - c. Tidak Setuju
  - d. Sangat Tidak Setuju
5. Sistem dapat melakukan proses manajemen data dengan baik?
  - a. Sangat Setuju
  - b. Setuju
  - c. Tidak Setuju
  - d. Sangat Tidak Setuju

(.....)

## 1. Form Utama

```
Private Sub Form_Load()  
Call SetWindowLong(Me.hwnd, GWL_EXSTYLE, GetWindowLong(Me.hwnd,  
GWL_EXSTYLE) Or WS_EX_LAYERED)  
Call SetLayeredWindowAttributes(Me.hwnd, RGB(255, 0, 255), 220,  
LWA_ALPHA Or LWA_COLORKEY)  
End Sub  
  
Private Sub isButton1_Click()  
Kriteria.Show 1  
End Sub  
  
Private Sub isButton2_Click()  
JenisPelatihan.Show 1  
End Sub  
  
Private Sub isButton3_Click()  
Histori.Show 1  
End Sub  
  
Private Sub isButton4_Click()  
Pegawai.Show 1  
End Sub  
  
Private Sub isButton5_Click()  
Pelatihan.Show 1  
End Sub  
  
Private Sub isButton6_Click()  
Login.Show 1  
End Sub  
  
Private Sub isButton7_Click()  
Login.Show 1  
  
End Sub
```

## 2. Form Kriteria

```
Private Sub Form_Load()  
Combo1.AddItem "Usia"  
Combo1.AddItem "Masa Kerja"  
Combo1.AddItem "Golongan"  
Combo1.ListIndex = 0  
isButton1_Click  
End Sub  
  
Private Sub isButton1_Click()  
If Option6.Value = True Then  
Frame2.Visible = True  
Frame3.Visible = False  
Frame4.Visible = False  
LV1.ColumnHeaders.Remove (8 - 1)  
LV1.ColumnHeaders.Remove (7 - 1)
```

```

LV1.ColumnHeaders.Remove (6 - 1)
LV1.ColumnHeaders.Remove (5 - 1)
Text7 = 1
Load_usia
panggilusia

ElseIf Option7.Value = True Then
Frame3.Visible = True
Frame2.Visible = False
Frame4.Visible = False
LV1.ColumnHeaders.Remove (8 - 1)
LV1.ColumnHeaders.Remove (7 - 1)
LV1.ColumnHeaders.Remove (6 - 1)
LV1.ColumnHeaders.Remove (5 - 1)
Text7 = 2
Load_masakerja
panggilmasakerja

ElseIf Option8.Value = True Then
Frame3.Visible = False
Frame2.Visible = False
Frame4.Visible = True
LV1.ColumnHeaders.Remove (8 - 1)
LV1.ColumnHeaders.Remove (7 - 1)
LV1.ColumnHeaders.Remove (6 - 1)
LV1.ColumnHeaders.Remove (5 - 1)
Text7 = 3
Load_golongan
End If
End Sub

Private Sub isButton2_Click()
LV1.ColumnHeaders.Remove (8 - 1)
LV1.ColumnHeaders.Remove (7 - 1)
LV1.ColumnHeaders.Remove (6 - 1)
LV1.ColumnHeaders.Remove (5 - 1)

Call panggilusia
Load_usia

End Sub

Private Sub isButton3_Click()
LV1.ColumnHeaders.Remove (8 - 1)
LV1.ColumnHeaders.Remove (7 - 1)
LV1.ColumnHeaders.Remove (6 - 1)
LV1.ColumnHeaders.Remove (5 - 1)
Call panggilmasakerja
Load_masakerja

End Sub

Private Sub isButton5_Click()
Unload Me
End Sub

```



```

Private Sub isButton4_Click()
LV1.ColumnHeaders.Remove (8 - 1)
LV1.ColumnHeaders.Remove (7 - 1)
LV1.ColumnHeaders.Remove (6 - 1)
LV1.ColumnHeaders.Remove (5 - 1)
Call panggilgolongan
Load_golongan
End Sub

```

### 3. Form Jenis Pelatihan

```

Dim SaveKode, jabatan, jk, sertifikasi, golongan, pernah,
mencari As String

Private Sub Form_Load()
Comb1.Clear
Comb1.AddItem "Kepala Sekolah"
Comb1.AddItem "Guru Kelas"
Comb1.AddItem "Guru Bidang Studi"
Comb1.AddItem "Staf"
Comb1.ListIndex = 0

Text1 = ""
Call WarnaBG(Me)
Frame3.Enabled = False

SaveKode = "Simpan"

Option2.Value = True
Option4.Value = True
jabatan = "Guru"
sertifikasi = "Belum"
pernah = "Belum"

buka
sql = "select * from jenis"
Set rsRs = conn.Execute(sql)
LV1.ListItems.Clear
While Not rsRs.EOF
    Set lv = LV1.ListItems.Add(, , LV1.ListItems.Count + 1)
    lv.SubItems(1) = Trim(rsRs!jenis_pelatihan)
    lv.SubItems(2) = Trim(rsRs!sertifikasi)
    lv.SubItems(3) = Trim(rsRs!jabatan)
    lv.SubItems(4) = Trim(rsRs!pernah_mengikuti)
    rsRs.MoveNext
Wend
End Sub

Private Sub isButton1_Click()
If SaveKode = "Simpan" Then

SQLsimpan = "INSERT INTO jenis(jenis_pelatihan,
sertifikasi,jabatan,pernah_mengikuti )" & _
"VALUES('" & Text1 & "', '" & sertifikasi & "', '" & Comb1 &

```

```

"' , '" & pernah & "'"
Set rsRs = conn.Execute(SQLsimpan)
MsgBox "Data Berhasil Di Simpan"
ElseIf SaveKode = "Update" Then
SQLubah = "UPDATE jenis SET jenis_pelatihan='" & Text1.Text & _
          "' ,sertifikasi='" & sertifikasi & _
          "' ,jabatan='" & Combol.Text & _
          "' ,pernah_mengikuti='" & pernah & _
          "' WHERE jenis_pelatihan='" & Text1.Text & "'"

          Set rsRs = conn.Execute(SQLubah)
          MsgBox "Data Berhasil Diubah"
          SaveKode = "Simpan"

End If
Form_Load
End Sub

Private Sub isButton2_Click()
SaveKode = "Simpan"
Form_Load
End Sub

Private Sub isButton3_Click()
SQLhapus = "DELETE FROM jenis WHERE jenis_pelatihan='" & mencari
& "'"
          Set rsRs = conn.Execute(SQLhapus)
          MsgBox "Data Dihapus!", vbInformation, "Hapus Data"
          Form_Load
End Sub

Private Sub isButton4_Click()
Unload Me
End Sub

Private Sub LV1_Click()
SaveKode = "Update"
Dim op1, op2, op3 As String

mencari = LV1.ListItems(LV1.SelectedItem.Index).SubItems(1)
cari = "select * from jenis where jenis_pelatihan like '%" &
mencari & "%'"
          Set rsRs = conn.Execute(cari)
          While Not rsRs.EOF
              Text1.Text = rsRs!jenis_pelatihan

              op2 = rsRs!sertifikasi
              op3 = rsRs!jabatan
              op1 = rsRs!pernah_mengikuti
rsRs.MoveNext
Wend

If op2 = "Belum" Then
Option2.Value = True
ElseIf op2 = "Sudah" Then
Option1.Value = True

```

```

End If If op1 = "Belum" Then
Option4.Value = True
ElseIf op1 = "Sudah" Then
Option3.Value = True

End If
Combo1 = LV1.ListItems (LV1.SelectedItem.Index) .SubItems (3)
End Sub

Private Sub Option1_Click()
sertifikasi = "Sudah"
End Sub

Private Sub Option2_Click()
sertifikasi = "Belum"
End Sub

Private Sub Option5_Click()
jabatan = "Kepala Sekolah"
End Sub

Private Sub Option6_Click()
jabatan = "Guru"
End Sub

Private Sub Option3_Click()
pernah = "Sudah"
End Sub

Private Sub Option4_Click()
pernah = "Belum"
End Sub

Private Sub Text1_GotFocus()
Text1.BackColor = Putih
End Sub

Private Sub Text1_LostFocus()
Text1.BackColor = AbuAbu
End Sub
Private Sub Text1_Change()
If Len(Text1) > 2 Then
    Frame3.Enabled = True
Else
    Frame3.Enabled = False
End If
End Sub

```

#### 4. Form Guru

```

Dim SaveKode, jabatan, jk, sertifikasi, golongan, mencari As
String

Function calculateAge(dateOfBirth As Date, fromDate As Date) As

```

```

String
    Dim dateNow As Date
    Dim tgl As Date
    Dim tgl1 As Date

    Dim years As Long
    Dim months As Long
    Dim days As Long

    Dim yearWord As String
    Dim monthWord As String
    Dim dayWord As String

    dateNow = fromDate
    tgl = dateOfBird

    ' menghitung tahun
    years = DateDiff("yyyy", tgl, dateNow)
    If Month(tgl) > Month(dateNow) Then
        years = years - 1
    ElseIf Month(tgl) = Month(dateNow) And Day(tgl) >
Day(dateNow) Then
        years = years - 1
    ElseIf Month(tgl) = Month(dateNow) And Day(tgl) =
Day(dateNow) Then
        GoTo finally ' jika bulan dan tanggal sama maka
perhitungan selesai
    End If

    ' menghitung bulan
    tgl = DateAdd("yyyy", years, tgl)
    months = DateDiff("m", tgl, dateNow)
    If Day(tgl) > Day(dateNow) Then
        months = months - 1
    ElseIf Month(tgl) = Month(dateNow) And Day(tgl) >=
Day(dateNow) Then
        months = months - 1
    End If
    tgl = DateAdd("m", months, tgl)
    ' menghitung hari
    days = DateDiff("d", tgl, dateNow)

finally:
    yearWord = IIf(years = 0, "0 Tahun ", years & " Tahun ")
    monthWord = IIf(months = 0, "0 Bulan ", months & " Bulan ")
    dayWord = IIf(days = 0, "0 Hari", days & " Hari ")
    calculateAge = yearWord & monthWord & dayWord
    calculateAge = Trim(calculateAge)
End Function

Function calculateAge1(dateOfBird As Date, fromDate As Date) As
String
    Dim dateNow As Date
    Dim tgl As Date
    Dim tgl1 As Date

```

```

Dim years As Long
Dim months As Long
Dim days As Long

Dim yearWord As String
Dim monthWord As String
Dim dayWord As String

dateNow = fromDate
tgl = dateOfBird

' menghitung tahun
years = DateDiff("yyyy", tgl, dateNow)
If Month(tgl) > Month(dateNow) Then
    years = years - 1
ElseIf Month(tgl) = Month(dateNow) And Day(tgl) >
Day(dateNow) Then
    years = years - 1
ElseIf Month(tgl) = Month(dateNow) And Day(tgl) =
Day(dateNow) Then
    GoTo finally ' jika bulan dan tanggal sama maka
perhitungan selesai
End If

' menghitung bulan
tgl = DateAdd("yyyy", years, tgl)
months = DateDiff("m", tgl, dateNow)
If Day(tgl) > Day(dateNow) Then
    months = months - 1
ElseIf Month(tgl) = Month(dateNow) And Day(tgl) >=
Day(dateNow) Then
    months = months - 1
End If

tgl = DateAdd("m", months, tgl)

' menghitung hari
days = DateDiff("d", tgl, dateNow)

finally:
yearWord = IIf(years = 0, "0 ", years & " ")
monthWord = IIf(months = 0, "0 ", months & " ")
dayWord = IIf(days = 0, "0 ", days & " ")
'menghitung tahun saja
calculateAge1 = yearWord
calculateAge1 = Trim(calculateAge1)

End Function

Private Sub Command1_Click()
Dim usia As String
Dim usia1 As String

usia = " " & calculateAge(DTPicker1, DTPicker3)
Text3 = usia
usia1 = " " & calculateAge1(DTPicker1, DTPicker3)

```

```

        Text4 = usia1
    End Sub
    Private Sub Command2_Click()
        Dim lama As String
        Dim lama1 As String

        lama = " " & calculateAge(DTPicker2, DTPicker3)
        Text5 = lama

        lama1 = " " & calculateAge1(DTPicker2, DTPicker3)
        Text6 = lama1
    End Sub

    Private Sub DTPicker1_Change()
        Command1_Click
    End Sub

    Private Sub DTPicker1_GotFocus()
        Command1_Click
    End Sub

    Private Sub DTPicker1_LostFocus()
        Command1_Click
    End Sub

    Private Sub DTPicker2_Change()
        Command2_Click
    End Sub

    Private Sub DTPicker2_GotFocus()
        Command2_Click
    End Sub

    Private Sub DTPicker2_LostFocus()
        Command2_Click
    End Sub

    Private Sub Form_Activate()
        Text1.SetFocus
        jabatan = "Guru"
        jk = "Pria"
        sertifikasi = "Belum"
        SaveKode = "Simpan"
    End Sub

    Private Sub Form_Load()
        Call WarnaBG(Me)

        Option3.Value = True
        Option2.Value = True

        Pic1.Enabled = False

        DTPicker1 = Date
        DTPicker2 = Date
        DTPicker3 = Date
    
```

```

Combo1.Clear
Combo1.AddItem "Kepala Sekolah"
Combo1.AddItem "Guru Kelas"
Combo1.AddItem "Guru Bidang Studi"
Combo1.AddItem "Staf"
Combo1.ListIndex = 0

Text1 = ""
Text2 = ""
Text3 = ""
Text4 = ""
Text5 = ""
Combo2.Clear
Combo2.AddItem "II a"
Combo2.AddItem "II b"
Combo2.AddItem "II c"
Combo2.AddItem "II d"

Combo2.AddItem "III a"
Combo2.AddItem "III b"
Combo2.AddItem "III c"
Combo2.AddItem "III d"

Combo2.AddItem "IV a"
Combo2.AddItem "IV b"
Combo2.AddItem "IV c"
Combo2.AddItem "IIV d"
Combo2.ListIndex = 0

buka
sql = "select * from guru"
Set rsRs = conn.Execute(sql)
LV1.ListItems.Clear
While Not rsRs.EOF
    Set lv = LV1.ListItems.Add(, , LV1.ListItems.Count + 1)
        lv.SubItems(1) = Trim(rsRs!NIP)
        lv.SubItems(2) = Trim(rsRs!nama)
        lv.SubItems(3) = Trim(rsRs!jk)
        lv.SubItems(4) = Trim(rsRs!golongan)
        lv.SubItems(5) = Trim(rsRs!jabatan)
        lv.SubItems(6) = Trim(rsRs!usia)
        lv.SubItems(7) = Trim(rsRs!masa_kerja)
        lv.SubItems(8) = Trim(rsRs!sertifikasi)
    rsRs.MoveNext
Wend
Command2_Click
Command1_Click
End Sub

Private Sub isButton1_Click()

If Text1 = "" Or Text2 = "" Then
MsgBox "Data Masih Ada Yang Kosong"
Exit Sub

```

```
End If
```

```
If Combo2 = "II a" Then  
golongan = 1  
ElseIf Combo2 = "II b" Then  
golongan = 2  
ElseIf Combo2 = "II c" Then  
golongan = 3  
ElseIf Combo2 = "II d" Then  
golongan = 4  
ElseIf Combo2 = "III a" Then  
golongan = 5  
ElseIf Combo2 = "III b" Then  
golongan = 6  
ElseIf Combo2 = "III c" Then  
golongan = 7  
ElseIf Combo2 = "III d" Then  
golongan = 8  
ElseIf Combo2 = "IV a" Then  
golongan = 9  
ElseIf Combo2 = "IV b" Then  
golongan = 10  
ElseIf Combo2 = "IV c" Then  
golongan = 11  
ElseIf Combo2 = "IV d" Then  
golongan = 12
```

```
End If
```

```
If SaveKode = "Simpan" Then  
SQLsimpan = "INSERT INTO guru(NIP, nama, jk, tgl_lahir,usia,  
tgl_masuk,masa_kerja, golongan,gol, sertifikasi,jabatan )" &  
"VALUES('" & Text1 & "', '" & Trim(Text2.Text) & "', '" & jk &  
"', '" & Format(DTPicker1.Value, "yyyy-MM-dd") & "', '" &  
Text4.Text & "', '" & Format(DTPicker2.Value, "yyyy-MM-dd") & "'  
, '" & Text6.Text & "', '" & Combo2 & "', '" & golongan & "', '"  
& sertifikasi & "', '" & Combo1 & "')" "  
Set rsRs = conn.Execute(SQLsimpan)
```

```
Load_usia  
panggilusia  
Kriteria.LV1.ColumnHeaders.Remove (8 - 1)  
Kriteria.LV1.ColumnHeaders.Remove (7 - 1)  
Kriteria.LV1.ColumnHeaders.Remove (6 - 1)  
Kriteria.LV1.ColumnHeaders.Remove (5 - 1)
```

```
Load_masakerja  
panggilmasakerja  
Kriteria.LV1.ColumnHeaders.Remove (8 - 1)  
Kriteria.LV1.ColumnHeaders.Remove (7 - 1)  
Kriteria.LV1.ColumnHeaders.Remove (6 - 1)  
Kriteria.LV1.ColumnHeaders.Remove (5 - 1)
```



```

Load_golongan
panggilgolongan
Kriteria.LV1.ColumnHeaders.Remove (8 - 1)
Kriteria.LV1.ColumnHeaders.Remove (7 - 1)
Kriteria.LV1.ColumnHeaders.Remove (6 - 1)
Kriteria.LV1.ColumnHeaders.Remove (5 - 1)

ElseIf SaveKode = "Update" Then
SQLubah = "UPDATE guru SET NIP='" & Text1.Text & _
"',nama='" & Trim(Text2.Text) & _
"'& jk='" & jk & _
"',tgl_lahir='" & Format(DTPicker1.Value, "yyyy-MM-
dd") & _
"',usia='" & Text4.Text & _
"',tgl_masuk='" & Format(DTPicker2.Value, "yyyy-MM-
dd") & _
"',masa_kerja='" & Text6.Text & _
"',golongan='" & Combo2 & _
"',gol='" & golongan & _
"',sertifikasi='" & sertifikasi & _
"',jabatan='" & Combo1 & _
"' WHERE NIP='" & Text1.Text & "'"

Set rsRs = conn.Execute(SQLubah)
MsgBox "Data Berhasil Diubah"
SaveKode = "Simpan"

Load_usia
panggilusia
Kriteria.LV1.ColumnHeaders.Remove (8 - 1)
Kriteria.LV1.ColumnHeaders.Remove (7 - 1)
Kriteria.LV1.ColumnHeaders.Remove (6 - 1)
Kriteria.LV1.ColumnHeaders.Remove (5 - 1)

Load_masakerja
panggilmasakerja
Kriteria.LV1.ColumnHeaders.Remove (8 - 1)
Kriteria.LV1.ColumnHeaders.Remove (7 - 1)
Kriteria.LV1.ColumnHeaders.Remove (6 - 1)
Kriteria.LV1.ColumnHeaders.Remove (5 - 1)

Load_golongan
panggilgolongan
Kriteria.LV1.ColumnHeaders.Remove (8 - 1)
Kriteria.LV1.ColumnHeaders.Remove (7 - 1)
Kriteria.LV1.ColumnHeaders.Remove (6 - 1)
Kriteria.LV1.ColumnHeaders.Remove (5 - 1)
End If

Form_Load
End Sub

Private Sub isButton2_Click()
SaveKode = "Simpan"

```

```

Form_Load
End Sub

Private Sub isButton3_Click()
SQLhapus = "DELETE FROM guru WHERE NIP='" & mencari & "'"
    Set rsRs = conn.Execute(SQLhapus)
    MsgBox "Data Dihapus!", vbInformation, "Hapus Data"
    Form_Load
End Sub

Private Sub isButton4_Click()
Unload Me
End Sub

Private Sub LV1_Click()
Pic1.Enabled = True
SaveKode = "Update"
Dim op1, op2, op3 As String

mencari = LV1.ListItems(LV1.SelectedItem.Index).SubItems(1)

cari = "select * from guru where NIP like '%" & mencari & "%'"
    Set rsRs = conn.Execute(cari)
    While Not rsRs.EOF
        Text1.Text = rsRs!NIP
        Text2.Text = rsRs!nama
        Combo2.Text = rsRs!golongan
        DTPicker1.Value = rsRs!tgl_lahir
        DTPicker2.Value = rsRs!tgl_masuk

        op1 = rsRs!jk
        op2 = rsRs!sertifikasi
        op3 = rsRs!jabatan
    rsRs.MoveNext
    Wend

    If op1 = "Pria" Then
        Option3.Value = True
    ElseIf op1 = "Wanita" Then
        Option4.Value = True
    End If

    If op2 = "Belum" Then
        Option2.Value = True
    ElseIf op2 = "Sudah" Then
        Option1.Value = True
    End If

    Combo1 = LV1.ListItems(LV1.SelectedItem.Index).SubItems(5)

    DTPicker1_Change
    DTPicker2_Change
End Sub

Private Sub Option1_Click()

```

```
sertifikasi = "Sudah"
End Sub
Private Sub Option2_Click()
sertifikasi = "Belum"
End Sub

Private Sub Option3_Click()
jk = "Pria"
End Sub

Private Sub Option4_Click()
jk = "Wanita"
End Sub

Private Sub Option5_Click()
jabatan = "Kepala Sekolah"
End Sub

Private Sub Option6_Click()
jabatan = "Guru"
End Sub

Private Sub Text1_Change()
If Len(Text1) > 2 Then
    Pic1.Enabled = True
Else
    Pic1.Enabled = False
End If
End Sub

Private Sub Text1_GotFocus()
Text1.BackColor = Putih
End Sub

Private Sub Text1_LostFocus()
Text1.BackColor = AbuAbu
End Sub
Private Sub Text2_GotFocus()
Text2.BackColor = Putih
End Sub

Private Sub Text2_LostFocus()
Text2.BackColor = AbuAbu
End Sub
Private Sub combo2_DropDown()
Combo2.BackColor = Putih
End Sub

Private Sub combo2_GotFocus()
Combo2.BackColor = Putih
End Sub

Private Sub combo2_LostFocus()
Combo2.BackColor = AbuAbu
End Sub
```

## 5. Form Seleksi

```
Dim JenisPelatihan, cek_duplikat, kepala, xxxx, id_jenis, jabatan, usia, jk, sertifikasi, masakerja, op, golongan, mencari As String
Private Sub Combo1_Click()
    buka
    cari = "select * from jenis where jenis_pelatihan like '%" & Combo1 & "%'"
    Set rsRs = conn.Execute(cari)
    While Not rsRs.EOF
        sertifikasi = rsRs!sertifikasi
        jabatan = rsRs!jabatan

    rsRs.MoveNext
Wend
End Sub

Private Sub Command1_Click()
    LV1.ListItems.Clear
    If Option9.Value = True Then
        kepala = "Nilai Terendah"
    ElseIf Option10.Value = True Then
        kepala = "Nilai Tertinggi"
    End If
    k = IIf(usia = "Usia Muda", "usia_muda, ", IIf(usia = "Usia Parobaya", "usia_parobaya, ", IIf(usia = "Usia Tua", "usia_tua, ", "")))
    k = k + IIf(masakerja = "Masa Kerja Baru", "masakerja_baru, ", IIf(masakerja = "Masa Kerja Lama", "masakerja_lama, ", ""))
    k = k + IIf(golongan = "Golongan Rendah", "gol_rendah, ", IIf(golongan = "Golongan Sedang", "gol_sedang, ", IIf(golongan = "Golongan Tinggi", "gol_tinggi, ", "")))
    k = Left(k, Len(k) - 2)

    If cek_duplikat = "Sudah" And ListView1.ListItems.Count = 0 Then

        LV1.ListItems.Clear
        Exit Sub

    ElseIf cek_duplikat = "Sudah" Then

        For y = 1 To ListView1.ListItems.Count
            s = "SELECT nama , NIP, " + k + " " + _
                "From guru " + _
                "where sertifikasi like '%" & sertifikasi & "%' and jabatan like '%" & jabatan & "%' and NIP like '%" & ListView1.ListItems(y).SubItems(1) & "%' "
            Text3 = s
            sql = s
            Set rsRs = conn.Execute(sql)
        Next y
```

```

ElseIf cek_duplikat = "Belum" Then
s = "SELECT nama , NIP, " + k + " " + _
"From guru " + _
"where sertifikasi like '%" & sertifikasi & "%' and jabatan
like '%" & jabatan & "%' "
Text3 = s
sql = s
Set rsRs = conn.Execute(sql)
End If

Dim a As Integer, B As Integer, c As Integer
c = LV1.ColumnHeaders.Count
If LV1.ColumnHeaders.Count > 1 Then
B = c - 1
For a = 0 To B - 2
LV1.ColumnHeaders.Remove (c - a)

Next a
End If

LV1.ListItems.Clear
lv2.ListItems.Clear

With LV1
.ColumnHeaders.Add , , x & " " & usia & " " & x, 2300, 2
.ColumnHeaders.Add , , x & " " & masakerja & " " & x, 2300, 2
.ColumnHeaders.Add , , x & " " & golongan & " " & x, 2300, 2
.ColumnHeaders.Add , , x & " " & kepala & " " & x, 2300, 2
End With

Adodc1.ConnectionString = "" & _
"Provider=MSDASQL.1;Persist Security Info=False;Data
Source=pelatihan"
Adodc1.RecordSource = sql
Adodc1.Refresh
Dim sB As Variant
On Error Resume Next

While Not Adodc1.Recordset.EOF

Set sB = LV1.ListItems.Add(, "XXX" & Adodc1.Recordset.Fields(0),
Adodc1.Recordset.Fields(0))
sB.SubItems(1) = Format(Adodc1.Recordset.Fields(1))
sB.SubItems(2) = Format(Adodc1.Recordset.Fields(2), "0.00")
sB.SubItems(3) = Format(Adodc1.Recordset.Fields(3), "0.00")
sB.SubItems(4) = Format(Adodc1.Recordset.Fields(4), "0.00")
sB.SubItems(5) = Format(Adodc1.Recordset.Fields(5), "0.00")
sB.SubItems(6) = Format(Adodc1.Recordset.Fields(6), "0.00")
sB.SubItems(7) = Format(Adodc1.Recordset.Fields(7), "0.00")
sB.SubItems(8) = Format(Adodc1.Recordset.Fields(8), "0.00")
sB.SubItems(9) = Format(Adodc1.Recordset.Fields(9), "0.00")
Adodc1.Recordset.MoveNext
Wend
Adodc1.Refresh
Dim max(30)

```

```

Dim min(30)

If Option9.Value = True Then
For I = 0 To LV1.ListItems.Count
    min(I) = 1
Next I
For I = 2 To 4
    For j = 1 To LV1.ListItems.Count
        If min(j) > LV1.ListItems(j).SubItems(I) Then
            min(j) = LV1.ListItems(j).SubItems(I)
        End If
    Next j
Next I

For I = 1 To LV1.ListItems.Count
    LV1.ListItems(I).SubItems(4 + 1) = min(I)

Next I
Else
For I = 0 To LV1.ListItems.Count
    max(I) = 0
Next I

For I = 2 To 4
    For j = 1 To LV1.ListItems.Count

        If max(j) < LV1.ListItems(j).SubItems(I) Then
            max(j) = LV1.ListItems(j).SubItems(I)
        End If
    Next j
Next I

For I = 1 To LV1.ListItems.Count
    Text4 = max(I)
    LV1.ListItems(I).SubItems(4 + 1) = max(I)

Next I
End If

If cek_duplikat = "Belum" Then
Text2 = cek_duplikat
Command2_Click

End If

ss = "truncate table temp_p"
Set rsRs = conn.Execute(ss)

For I = 1 To LV1.ListItems.Count

sql = "INSERT INTO temp_p(nip,a,b,c,d ) VALUES(' " &
        LV1.ListItems(I).SubItems(1) &
        " ', ' " &
LV1.ListItems(I).SubItems(2) &
        " ', ' " &
LV1.ListItems(I).SubItems(3) &
        " ', ' " &
LV1.ListItems(I).SubItems(4) &
        " ', ' " &

```

```

LV1.ListItems(I).SubItems(5) & "'"")

    Set rsRs = conn.Execute(sql)
Next I
LV1.ListItems.Clear

sql = "SELECT guru.nama, temp_p.* From guru INNER JOIN temp_p ON
guru.nip=temp_p.nip ORDER BY d desc"
Set rsRs = conn.Execute(sql)
LV1.ListItems.Clear
While Not rsRs.EOF
    Set lv = LV1.ListItems.Add(, , Trim(rsRs!nama))
        lv.SubItems(1) = Trim(rsRs!NIP)
        lv.SubItems(2) = Trim(rsRs!a)
        lv.SubItems(3) = Trim(rsRs!B)
        lv.SubItems(4) = Trim(rsRs!c)
        lv.SubItems(5) = Trim(rsRs!d)
    rsRs.MoveNext
Wend
End Sub

Private Sub Command2_Click()
On Error Resume Next

For I = 1 To LV1.ListItems.Count

For y = 1 To ListView1.ListItems.Count

If LV1.ListItems(I).SubItems(1) =
ListView1.ListItems(y).SubItems(1) Then
LV1.ListItems.Remove (LV1.ListItems(I).Index)

End If

Next y
Next I
End Sub

Private Sub Form_Load()
Adodc2.ConnectionString = "" & _
"Provider=MSDASQL.1;Persist Security Info=False;Data
Source=pelatihan"
Adodc2.RecordSource = "select * from pelatihan order by
id_pelatihan desc "
Adodc2.Refresh

usia = "Usia Muda"
masakerja = "Masa Kerja Baru"
golongan = "Golongan Rendah"
op = "Nilai Terendah"

buka
sql = "select * from jenis"
Set rsRs = conn.Execute(sql)
I = 0

```

```

While Not rsRs.EOF
Option11(I).Visible = True
Option11(I).Caption = Trim(rsRs!jenis_pelatihan)
rsRs.MoveNext
    I = I + 1
Wend

Option11(0).Value = True
Text1 = ""
End Sub

Private Sub isButton1_Click()
If Text1 = "" Then
MsgBox "Nama Pelatihan Masih Kosong"
Exit Sub
End If

sql = "INSERT INTO pelatihan(nama_pelatihan,id_jenis ) VALUES('" &
_
Trim(Text1.Text) & "','" & id_jenis & "')"
Set rsRs = conn.Execute(sql)

Form_Load
Adodc2.Refresh
xxxx = Adodc2.Recordset.Fields(0)

For I = 1 To lv2.ListItems.Count
sql = "INSERT INTO hasil(id_pelatihan,nip,cek_data ) VALUES('" &
_
CStr(xxxx) & "','" & lv2.ListItems(I).SubItems(2) &
_
,'"','" & "Sudah" & "')"

Set rsRs = conn.Execute(sql)
Next I

Form_Load
LV1.ListItems.Clear
lv2.ListItems.Clear
End Sub

Private Sub isButton2_Click()
Form_Load
LV1.ListItems.Clear
lv2.ListItems.Clear
End Sub

Private Sub isButton4_Click()
Unload Me
End Sub

Private Sub isButton5_Click()
Picture4.Visible = False
Frame1.Visible = True
End Sub

```



```

Private Sub isButton6_Click()
Frame1.Visible = False
Picture4.Visible = True
End Sub

Private Sub LV1_ItemClick(ByVal Item As MSComctlLib.ListItem)
sql = "SELECT * FROM guru where NIP like '%" &
LV1.SelectedItem.SubItems(1) & "%' "
Set rsRs = conn.Execute(sql)

While Not rsRs.EOF
Set lv = lv2.ListItems.Add(, , lv2.ListItems.Count + 1)
lv.SubItems(1) = Trim(rsRs!nama)
lv.SubItems(2) = Trim(rsRs!NIP)
lv.SubItems(3) = Trim(rsRs!golongan)
lv.SubItems(4) = Trim(rsRs!usia)
lv.SubItems(5) = Trim(rsRs!masa_kerja)
lv.SubItems(6) = LV1.SelectedItem.SubItems(4)
rsRs.MoveNext
Wend
LV1.ListItems.Remove (LV1.SelectedItem.Index)

End Sub

Private Sub Option1_Click()
usia = "Usia Tua"
End Sub

Private Sub Option11_Click(Index As Integer)
For x = 0 To 8
If Option11(x).Value = True Then
JenisPelatihan = Option11(x).Caption

End If
Next
cari = "select * from jenis where jenis_pelatihan like '%" &
JenisPelatihan & "%'"
Set rsRs = conn.Execute(cari)
While Not rsRs.EOF
sertifikasi = rsRs!sertifikasi
jabatan = rsRs!jabatan
id_jenis = rsRs!id_jenis
cek_duplikat = rsRs!pernah_mengikuti
Text2 = cek_duplikat
rsRs.MoveNext
Wend

s = "SELECT hasil.cek_data, guru.nama,guru.usia,guru.NIP " + _
"FROM guru INNER JOIN hasil ON guru.NIP = hasil.NIP " + _
"INNER JOIN pelatihan ON hasil.id_pelatihan =
pelatihan.id_pelatihan " + _
"where pelatihan.id_jenis like '%" & id_jenis & "%' "
Set rsRs = conn.Execute(s)

ListView1.ListItems.Clear
While Not rsRs.EOF
Set lv = ListView1.ListItems.Add(, ,

```

```

ListView1.ListItems.Count + 1)

        lv.SubItems(1) = Trim(rsRs!NIP)
        lv.SubItems(2) = Trim(rsRs!nama)
        lv.SubItems(3) = Trim(rsRs!usia)
        lv.SubItems(4) = Trim(rsRs!cek_data)
    rsRs.MoveNext
Wend

Text6 = ListView1.ListItems.Count
End Sub

Private Sub Option2_Click()
masakerja = "Masa Kerja Lama"
End Sub

Private Sub Option3_Click()
usia = "Usia Muda"
End Sub

Private Sub Option4_Click()
usia = "Usia Parobaya"
End Sub

Private Sub Option5_Click()
masakerja = "Masa Kerja Baru"
End Sub

Private Sub Option6_Click()
golongan = "Golongan Rendah"
End Sub

Private Sub Option7_Click()
golongan = "Golongan Sedang"
End Sub

Private Sub Option8_Click()
golongan = "Golongan Tinggi"
End Sub

Private Sub Text1_Change()
If Len(Text1) > 2 Then
    Frame1.Enabled = True
Else
    Frame1.Enabled = False
End If
End Sub

```